

REMARKS

We have amended independent claims 1,9, and 23 to include the feature that the voltage recovery device is connected in "shunt". We have addressed the Examiner's § 112 rejections in the amendments to the claims. We have also canceled claims 3, 16, 21, 22, which were withdrawn from consideration by the Examiner.

Prior Art Rejections

Independent Claims 1, 9 and 23

The Examiner has rejected claims 1-15 and 17-20 and 23 under 35 USC 103(a) as being unpatentable over Gyugyi at al (5,329,222 B1). We submit however that Gyugyi does not describe or suggest a voltage recovery device connected to the utility power network in "shunt", as recited in amended claims 1, 9 and 23. Rather, Gyugyi discloses a series connection to a distribution line through a series transformer. Moreover, we submit that connecting the voltage recovery device in shunt as required in the claims is significantly different than Gyugyi's series connection.

The Gyugyi patent states that an object of the invention is to provide a system and method for compensation of utility distribution line transients (Gyugyi, col. 3, lines 49 to 54 and col. 5, lines 5-8). It is clear from a full reading of the specification of the Gyugyi patent that injecting energy "in series" is an important feature of his invention and to substitute a shunt connection for the series injection connection is contrary to the teachings of the Gyugyi patent. Indeed, doing so would result in the loss of an advantage that was repeatedly promoted in the Gyugyi patent.

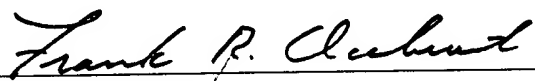
Applicant : Paul Frederick Koeppe et al.
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In view of the fact that claims 1, 9, 23 have been amended, claims 2-8, 17-18 are dependent on claim 1, and that claims 10-15, 19-20 depend on claim 9, Applicant asks that all claims be allowed. Enclosed is a Petition for Two Month Extension of Time and a check for \$400 for the required fee. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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Version with markings to show changes made

In the claims:

Claims 16, 21, and 22 have been cancelled.

Claim 1, 3, 4, 9, 12, 13, and 23 has been amended as follows:

1. (Once Amended) A voltage recovery device for connection to a utility power network which carries a nominal voltage, the voltage recovery device comprising an energy storage unit connected in shunt to the utility power network and configured to transfer real and reactive power between the utility power network and voltage recovery device at a [sufficient] level and for a [sufficient] duration to recover the voltage on the utility power network to within a predetermined proportion of the nominal voltage, following a fault condition detected on the utility power network.

4. (Once Amended) The voltage recovery device of claim [3] 2 wherein the voltage recovery device is configured to provide real and reactive power to the utility power [transmission line] network to within 0.90 P.U. of the nominal voltage within 0.5 seconds.

9. (Once Amended) A method of stabilizing a utility power network, the method comprising:

electrically connecting in shunt a voltage recovery device having an energy storage unit to the [distribution] utility power network,

detecting a fault condition on the utility power network; and

operating, in response to detecting the fault condition, the voltage recovery device to transfer real power and reactive power to the utility power network at a sufficient level and for a sufficient duration to recover the voltage on the utility power network to within a predetermined proportion of the nominal voltage.

12. (Once Amended) The method of claim [9] 10 further comprising configuring the voltage recovery device to provide real and reactive power to the transmission network to promote quick recovery of voltage to within acceptable utility standards within 0.5 seconds.

13. (Once Amended) The method of claim [9] 10 further comprising configuring the voltage recovery device to provide real and reactive power to the transmission [line] network to within 0.90 P.U. of the nominal voltage within 0.5 seconds.

23. (Once Amended) A method of stabilizing a utility power network wherein the utility power network includes a transmission network and a distribution network, the method comprising:

electrically connecting in shunt plural voltage recovery devices, each having an energy storage unit, to the distribution network,

detecting a fault condition on the utility power network; and

operating, in response to detecting the fault condition, one or more of the voltage recovery devices to transfer real power and reactive power to the utility power network at a sufficient level and for a sufficient duration to recover the voltage on the utility power network to within a predetermined proportion of a nominal voltage.